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Reducing Organized Retail Crime with Return Authorization and Consumer Linking

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ORC in Modern Retail

The consumer experience takes a hit when an organized retail crime (ORC) group actively targets a retailer. ORC, is a large, dangerous, and expensive threat to businesses nationwide—annually costing US retailers more than $700,000 for every $1 billion in revenue according to the National Retail Federation's Organized Retail Crime Survey. According to RILA reports, the merchandise stolen is often returned to the store for cash—or sold to unwitting buyers in person or through online auction sites.

The suspects have typically seemed to be nameless, faceless individuals with no predictable pattern to their fraud. Some retailers have tried to link the offenders by reviewing incident reports or comparing security tapes, while others have made painstaking efforts to train employees on how to recognize behaviors associated with illegal consumer activity. Nevertheless, the individual losses have remained difficult to connect because of their sheer size, scope, and complexity of the data that could potentially link the individuals.

Focusing on Returns Can Stop a Large ORC Leak

The first step you should consider when protecting your assets is to identify— and then shut off—the largest leaks. The returns process is a major one.

Appriss® Verify return authorization helps retailers address one of the key ORC initiatives—stopping fraudulent returns (often associated with shoplifting activities). Verify return authorizations are performed in real-time, at the point-of-return in any channel. It issues recommendation that the retailer accept, warn, or deny the consumer's return based on the retailer's own transaction history with the particular consumer in milliseconds, so it's fast, a seamless addition to your current returns process and requires no extra personnel to operate.

The second step in curtailing losses to ORC is to provide your analysts and investigators with the cutting-edge technology to build solid cases quickly. Appriss® Secure exception analytics takes exception reporting to the next level with work items that can help you tackle complex ORC cases.

- **No additional personnel required; you can save or re-position your LP staff for other issues.**

- **Real-time; it helps stop potential theft before it happens.**

- **Monitor every single return transaction within your company using sophisticated analytic models. Plus, you can build cases from your company's accumulated return history and known associations.**

- **Eliminates ORC's number-one, most profitable "fence," your own store (you offer full refunds + sales tax, not pennies on the dollar like Internet auction sites), so it could have the most significant impact on theft activities.**

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Consumer Linking Builds a View of Behavior and Associations

In the face of this rapidly growing organized crime problem, Appriss Retail developed Consumer Linking, a function within Verify return authorization. It is an automated process that helps you intelligently sift through all of your organization's consumer purchase and return transaction data, providing a way to link individuals to their own transaction history and to known associates.

Consumer Linking uses proprietary algorithms to help measure and validate strengths of data relationships to construct links within and between consumer identification data your company already collected during a purchase or return, including:

1. Original receipt number(s)
2. Driver's license
3. Shopper name/ address
4. Loyalty card
5. Credit/debit/other trackable tender
6. Shoppers' purchase details

Appriss Retail does not collect or utilize gender, race, nationality, physical characteristics, or marital status. Furthermore, it is important to note that Consumer Linking uses your data only; Appriss Retail does not comingle or share consumer data among retailers.
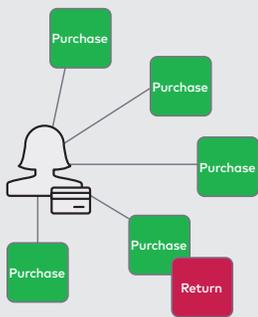
Consumer Linking Examples

Consumer Linking can revolutionize the methods in which you recognize and prevent organized retail crime. It will assist you in the following ways:

- **As an evidence source that such organized crime ring is impacting your chain.**

- **As a means to measure the strength of relationships within the ring and the size of the impact.**

- **Ultimately to help determine patterns and predict future instances of premeditated theft.**

The best way to visualize Consumer Linking is to consider some shopper examples. The graphics below show how within your own data consumers, their transactions, and any known relationships may be connected.

Normal Shopper

This graphic demonstrates how a typical shopper makes purchases and returns/exchanges. Consumer Linking offers the capability to link identifiers such as original transaction number, hashed credit cards, loyalty cards, or consumer ID number to create a transaction history on each consumer.

Suspicious Shopper
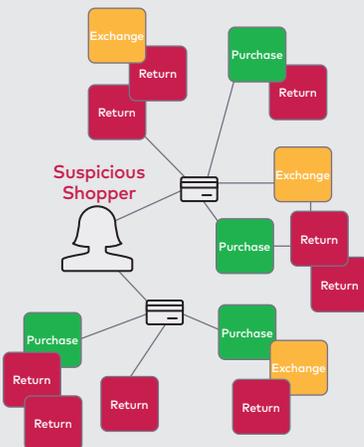
This shows the beginnings of unusual behavior from the shopper—the quantity and percentage of returns/exchanges, along with the usage of multiple tenders is becoming suspicious. The automated method both identifies and connects individuals and their tender formats, depicting a web of consumer return patterns that provide additional information on which to base decisions about return authorizations.

Linked Fraud Ring
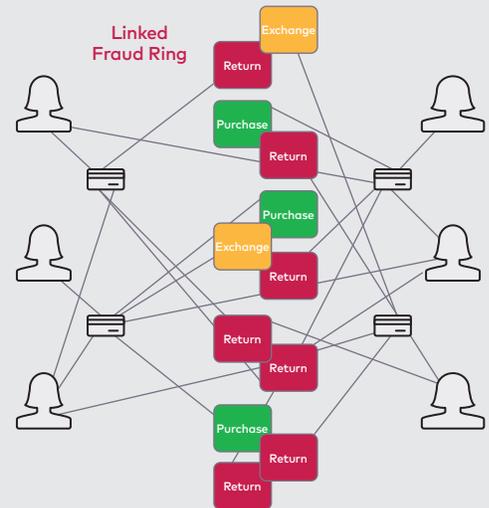
This is an example of how a fraud ring can be mapped out by connecting people using advanced algorithms that link consumers making merchandise purchases and returns. By consistently tracking all returns and exchanges through Verify Consumer Linking, retailers can identify strong relationships and connect these associated shoppers that may be part of an ORC network.

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Case Study: Specialty Retailer

One major specialty retailer in New York City has already reaped the benefits of this solution. Using data just from their own transactions, where orange and green icons signify individually identified and known consumers, advanced algorithms linked consumers making merchandise returns who: 1) used the same credit card (SC); 2) returned merchandise four or more times within 30 minutes of each other, in the same store (RT); and 3) had the same residential address (SA).

As indicated in the graphic below, numerous consumers were automatically connected by a statistical analytics model and plotted by the criteria listed above. When viewed separately, these individual associations may have appeared insignificant, but together they painted a broader picture of ongoing, potentially fraudulent behavior.

Through these findings, the retailer not only discovered it had fallen victim to return fraud, but ultimately assisted law enforcement in identifying and incarcerating members of a booming organized crime ring operating actively and successfully in New York. In addition, the chart in the bottom left of the graphic shows that return dollars peaked at $175,313 in July, and then dropped dramatically to $18,438 in August when the stores deployed Verify return authorization.

Year	Month	Returns
First Year	June	$ 133,521
	July	$ 175,313
	Aug	$ 18,438
	Sept	$ 1,857
	Oct	$ 387
	Nov	$ 105
	Dec	$ 2,185
Second Year	Jan	$ 2,026
	Feb	$ 717
	Mar	$ 92
	April	$ 278
	May	$ 46
	June	$ 45
	July	$ 281
	Oct	$ 515
Grand Total		**$ 335,806**

"An ORC scheme may be as simple as returning stolen items to store service desks for cash refunds or store credit. ORC offenders have been caught replacing stolen electronics with old batteries to simulate product weight, then re-sealing the items and returning them for a refund. Later, unknowing consumers may purchase these altered goods, only to return them as well. In these scenarios, retailers not only lose their original goods, they then pay out on two consumer refunds. "

—Dr. Read Hayes
Director of the Loss Prevention Research Council

Example Return Fraud Ring
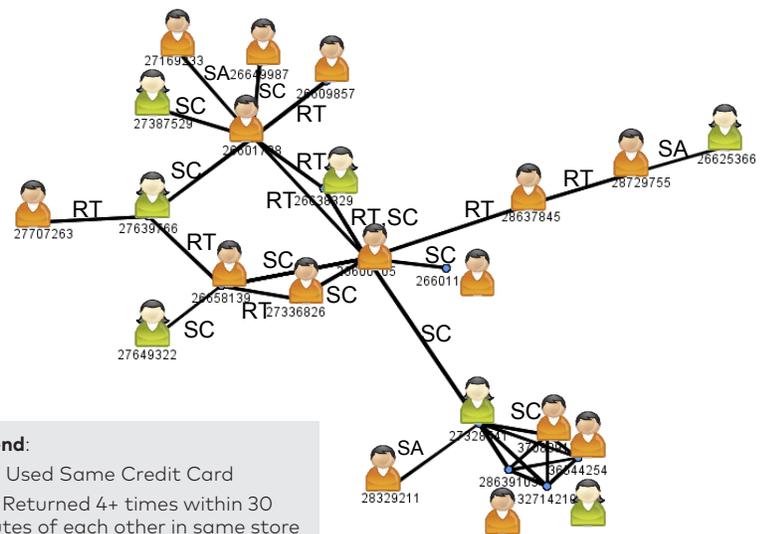
Legend:
SC = Used Same Credit Card
RT = Returned 4+ times within 30 minutes of each other in same store
SA = Same Address/Building

Graphic automatically created by advanced algorithms to help identify and reduce ORC.

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Appriss Retail's return optimization solutions are proven to significantly reduce return rates, and thereby return sales dollars, by helping prevent fraud and abuse. Be prepared to stop asset leaks, satisfy a core tenet of your ORC initiatives, and deliver the ORC justification that your executives require.

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Case Study: Big Box Retailer

A second and equally bold ring was identified for a nationwide big box retailer in their San Francisco Bay area district. A group of people using 11 different IDs and 138 different payment cards (credit and gift cards) visited 38 of this brand's stores in Northern California. As you can see from the spaghetti-like graphic below, each purchase and return combination is connected by black lines, while the light gray lines connect each transaction to a unique identifier, all weaving an intertwined network of relationships.

Verify's Consumer Linking strength is in its ability to build those links over time and determine the strength of those relationships within the matrix of this social group. It was learned that within a very short time this group accumulated purchases of $33,000 and returns of $30,000, with many members purchasing the exact same items, keeping them for less than 24 hours and performing returns. The retailer rapidly identified the ring and shut it down.

Consumer Linking Examples

Law enforcement officials are often hesitant to act against ORC claims due to a lack of substantiated evidence. But in the case of Verify, technology can augment existing staff and help resource-strapped retailers quickly build a solid case backed by comprehensive data analysis. Use of the results from Consumer Linking instantly puts a retailer ahead of the game in combating retail crime, helping them to deliver hard facts about specific consumers in fraud rings to the state officials, district attorneys, and law enforcement officers with the power to stop these crimes.

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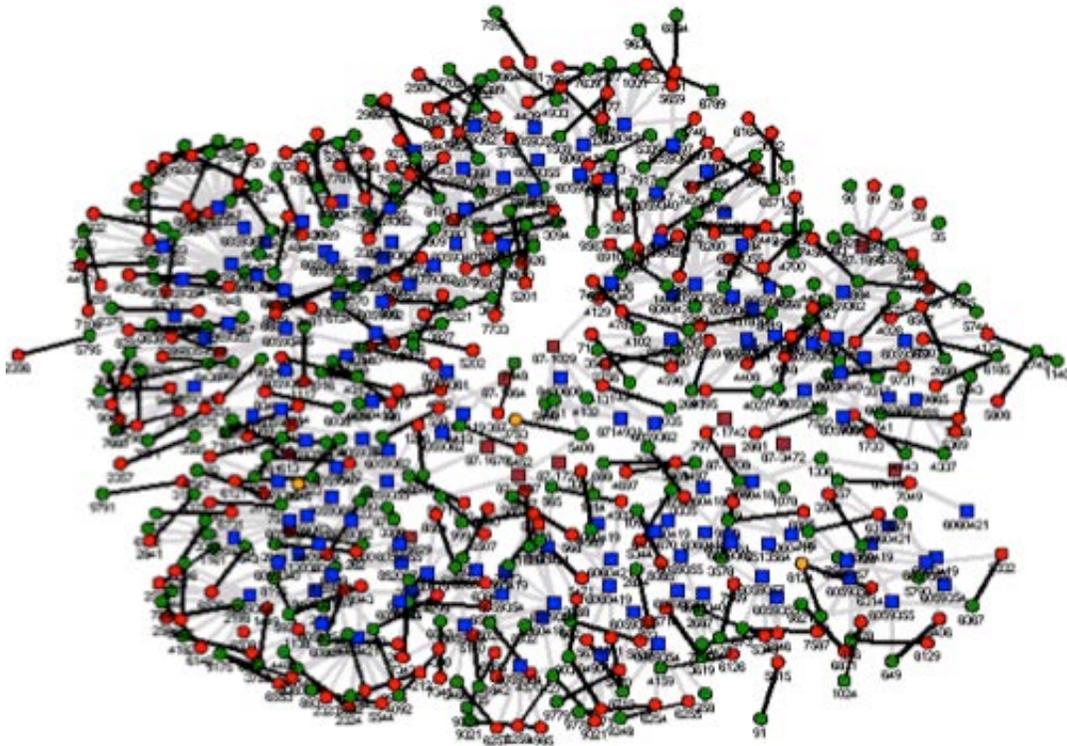
Verify Results Are Measured and Proven

Today's retailers are taking responsibility for safeguarding their revenue and need to consider the analytical tools now available to detect organized retail crime as well as other forms of fraud that affect their bottom line. Appriss Retail is ready to help you apply evidence-based asset protection efforts and implement more sophisticated ORC intelligence to deal with both basic and complex, evolving criminal networks and schemes.

One of the main drawbacks to the traditional feet-on-the-street approach to ORC is its lack of accountability when corporate business metrics are applied to it. Sure, you are preventing crime rates from escalating, but what's the real dollar payback for these ORC teams? Where's the hard ROI? Verify is built on a framework of monitoring a retailer's every return transaction in real-time, combining that with data from all of your chain's transactions, and reporting the results back to the business. Secure follows up by discovering hidden links and using analytics to help pinpoint suspicious groups and focus team efforts on the worst scenarios.

- **Theft may be difficult to measure, but return rate is not. Using Verify, as return rate and return dollars decline you can point to direct ROI benefits and allocate a portion of such to ORC reduction (since you are preventing thieves from perpetrating fraudulent returns).**

- **Verify return authorization can help you achieve a guaranteed ROI, something you can bank on when presenting ORC strategy to your management team.**

- **The Consumer Linking crime ring tool even helps to put a value on specific groups of related theft issues, further validating your targeted efforts.**

Modern ORC solutions are both collaborative and individual, and aimed at directly attacking ORC operatives as well as modulating their environment.

By being active in the battle against crime and loss, you can protect your business and also join in communicating the message that ORC offenders will be discovered and prosecuted. Modern ORC solutions are both collaborative and individual, and aimed at directly attacking ORC operatives as well as modulating their environment. Advanced technology solutions like Verify and Secure can and should be used to deter organized retail crime rings. With innovative, calculable solutions, all retailers can efficiently evaluate, validate, and even predict a crime problem before it's too late.

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